

REMARKS

This application has been reviewed in light of the Office Action dated April 21, 2005. Claims 1-43 remain pending in this application. Claims 2, 11, 20, 29, and 44-56 have been canceled, without prejudice or disclaimer of subject matter. Claims 1, 3-5, 7-10, 16-19, 21-23, 25-28, 30, and 32-43 have been amended to define more clearly what Applicants regard as their invention. Claims 1, 10, 19, 28, and 32-43 are in independent form. Favorable reconsideration is requested.

Claims 1, 4, 6, 10, 13, 15, 19, 22, 24, 28, and 31-43 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,889,952 (Honicutt). Claims 2, 11, 20, 29, and 30 were rejected under 35 U.S.C. § 103(a) as being obvious from Honicutt in view of U.S. Patent Application Publication No. US2003/0028653 (New, Jr.).

Claim 1 is directed to an information processing method of controlling access to computer resource(s) managed by an operating system, such as a file, network, storage device, display screen, or external device. The method includes an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process. A determination includes determining whether an access right for the computer resource designated by the operation request intercepted in the interception step is present. The method also includes a processing step of, if it is determined in the determination step that the access right is present, transferring the operation request to the operating system and returning a result from the operating system to the process. A denial

step includes denying the operation request if it is determined in the determination step that no access right is present.

Among the notable features of Claim 1 are (1) intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process, and (2) accepting or denying, on the basis of the intercepted operation request, access to the computer resource by the process. For example, as shown in Fig. 2, a middleware (e.g., a resource management program 203) is placed between a process (e.g., an application 2021, an OS function operation 2022 such as screen capture, a daemon, etc.) and an operating system 2012.^{1/} By virtue of the features of Claim 1, operation of the computer resources can be controlled without revising the process or the operating system, which can improve the security of the computer resource.

Hunnicutt, as understood by Applicants, relates to an access check system for a network server using cached access permissions. The access check system comprises an access-cache for storing access-permissions generated by the server in response to resource access requests. The system retrieves the appropriate access-permission from the access-cache in response to the receipt of a request necessitating the same access-permission as already generated for an earlier processed request. A user-token cache is also employed to assign a unique user-token, to be used in the access-cache, to each user logged on to the server. Changes made to the user-token cache are reflected in the access-

^{1/}It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

cache by removing from the access-cache those entries containing the changed user-token. Changes made to an access control list are reflected in the access-cache by removing from the access-cache those entries containing the server resource with which the changed access control list is associated. Fig. 4 depicts an access-control list, while Fig. 5 illustrates access checking in flow diagram form.

Therefore, Hunnicutt is understood to relate to an access-check system between a network server and a client, in which after a request from the client is made the server checks an access-cache to determine if access can be granted. However, Hunnicutt does not teach or suggest intercepting, between a process and operating system, a request for a computer resource issued toward operating system from the process, and determining an access right for the computer resource, as recited in Claim 1.

That is, nothing in Hunnicutt would teach or suggest (1) intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process, and (2) accepting or denying, on the basis of the intercepted operation request, access to the computer resource by the process, as recited in Claim 1.

Accordingly, Claim 1 is believed to be patentable over Hunnicutt.

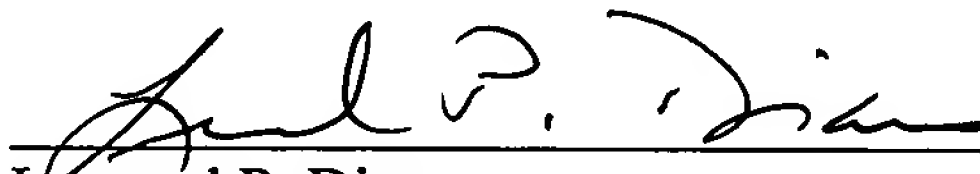
Independent Claims 10, 19, 28, and 32-43 each recite certain features which are similar in many relevant respects to those discussed above with respect to Claim 1 and therefore are also believed to be patentable over Hunnicutt for at least the reasons discussed above.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Leonard P. Diana

Attorney for Applicants

Registration No.: 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200